

REMARKS

Entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested.

Status

As is correctly indicated on the Office Action Summary, Claims 1-18 are pending. Claims 1-2 and 7-18 have been withdrawn from consideration. Claims 3-6 stand rejected. Acknowledgment has been made to a claim for foreign priority under 35 U.S.C. § 119 (a)-(d) or (f), yet none of the certified copies of the priority documents have been received.

Summary of Amendments

By the foregoing amendments the Title of the application has been amended to correct a typographical error. The Specification has been amended to correct labeling of Figures 5 and 7. No new matter has been added.

Also by the foregoing amendments, Claims 3, 4, and 6 have been canceled. Claim 5 has been amended to correct minor, typographical, and/or linguistic errors. Claims 19 and 20 have been added. Support for Claims 19 and 20 may be found throughout the Specification, especially Paragraph 0015, and at least in original Claims 1-4. Claim 21 has also been added. Support for Claim 21 may be found throughout the Specification, especially Paragraph 0014, and at least in original Claim 6. Accordingly, no new matter has been added.

Specification

The Specification had been objected to for containing errors in the Title and for incompletely labeling Figures 5 and 7. *See Page 2 of the Official Action mailed January 2, 2003 ("Action").* Applicants believe that the foregoing amendments to the Specification have rendered moot these objections.

Claim Objections

Claims 3-6 were objected to for various reasons set forth on Page 2 of the Action. Applicants believe that the foregoing amendments have rendered moot these objections.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 3-6 were rejected under 35 U.S.C. § 112, First Paragraph, as purportedly lacking written description, as purportedly not enabled, and as purportedly indefinite. *See Action, Pages 3-7.* These rejections are respectfully traversed.

Not to acquiesce in the Examiner's rejections, but solely to facilitate prosecution, Applicants have canceled Claims 3, 4, and 6, have amended Claim 5, and have added Claims 19-21 to better define Applicants' invention. These claims now specify that the isolated nucleic acid sequences correspond to SEQ ID NOs 1 and 2; to SEQ ID NOs 1 and 2 which have had no more than 5 addition, deletions, or substitutions; to sequences which hybridize under stringent conditions to SEQ ID NOs 1 and 2; and to sequences with 90% homology thereto.

Applicants believe that these amendments have rendered moot the notion that Applicants were not in possession of the claimed invention, that one of skill in the art could not make or use the claimed invention, or that one of skill in the art would not understand

what is claimed. Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 112, First Paragraph, rejections.

Rejections Under 35 U.S.C. § 101

Claims 3-6 were rejected under 35 U.S.C. § 101 as allegedly drawn to non-statutory subject matter. *See Action, Pages 7-8.* This rejection is respectfully traversed.

Not to acquiesce in the Examiner's rejection, but solely to facilitate prosecution, Applicants have canceled Claims 3, 4, and 6, have amended Claim 5, and have specified in new Claims 19-21 that the claimed nucleic acid sequences are *isolated*, as requested by the Examiner. Applicants maintain that these amendments have rendered moot the 35 U.S.C. § 101 rejections, and respectfully request their withdrawal.

Rejections Under 35 U.S.C. § 102(b)

Claims 3-6 were rejected under 35 U.S.C. § 102(b) as purportedly "anticipated by Bunkelmann et al. (GenBank Accession No. U37060, 23 April 1997, and SPTREMBL Accession No. Q38780, 01 November 1996)." *See Action, Pages 8-9.* This rejection is respectfully traversed.

Not to acquiesce in the Examiner's rejection, but solely to facilitate prosecution, Applicants have canceled Claims 3, 4, and 6, have amended Claim 5, and have added Claims 19-21. These claims now specify that the isolated nucleic acid sequences correspond to SEQ ID NOs 1 and 2; to SEQ ID NOs 1 and 2 which have had no more than 5 addition, deletions, or substitutions; to sequences which hybridize under stringent conditions to SEQ ID NOs 1 and 2, and to sequences with 90% homology thereto.

The Examiner concedes that Bunkelmann teaches an isolated nucleic acid sequence having but "72.1% sequence similarity to SEQ ID NO:2 and encoding a polypeptide having 80.4% sequence similarity to SEQ ID NO:1." *See Action, Page 9*. Because Claims 20 and 21 require 90% homology and because to anticipate a claim, a single source must contain *all* of the elements of the claim, Applicants maintain that Bunkelmann does not anticipate Claims 20 and 21. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379 (Fed. Cir. 1986).

The Examiner also concedes that Bunkelmann does not teach sequences "derived from barley" and "induced by high-temperature stress." *See Action, Page 9*. As indicated above, to anticipate a claim, Bunkelmann must disclose *all* elements of the claim. Because Bunkelmann fails to disclose at least the two elements mentioned by the Examiner, Applicants maintain that Bunkelmann fails to anticipate Claims 5 and 19.

Based on the foregoing, Applicants respectfully request withdrawal of the 35 U.S.C § 102(b) rejections over Bunkelmann.

CONCLUSION

From the foregoing, further and favorable consideration in the form of a Notice of Allowance is respectfully requested and earnestly solicited.

In the event that there are any questions relating to this response, or the application in general, it would be greatly appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,
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